## Message

From: pthomas@manuregy.com [pthomas@manuregy.com]

**Sent**: 8/1/2021 7:09:16 PM

To: ariel.szogi@usda.gov; 'Novak, Jeff' [jeff.novak@usda.gov]; matias.vanotti@usda.gov

**Subject**: Litter gasifier on the Delmarva Peninsula

Attachments: USDA-NRCS Practice 735.pdf; MTT Report Summary.pdf; 20210413\_064459.jpg; 20210413\_172934.jpg;

20210413\_172948.jpg; Twenty tons of Ecochar awaiting shipment.JPG

Ariel, Matias, and Jeff,

Last week, we purchased 5.4 acres of Heavy Industry-zoned property just south of Salisbury, Maryland for the installation and operation of one of our waste-agnostic gasification systems. This gasifier will dry and process 30,000 tons of broiler litter per year at a rate of 82 tons per day, 24/7, and this gasifier will be our 12<sup>th</sup>. It will produce 4,100 tons of biochar per year at a rate of 79 tons per week. The gasifier / thermal oxidizer will generate 16 million Btu of waste heat per hour, but since we will only need to use 4 million Btu of waste heat per hour to dry the litter from 30% to 15% moisture before it is augered into the gasifier at 5,000 pounds per hour, we may add a second gasifier in order to dry and process dewatered sewage sludge (i.e. pre-biosolids).

All of our gasifiers comply with NRCS Practice 735 ("Waste Gasification Facilities" - attached), as well as the EPA Region 3 Chesapeake Bay Program's manure best management practice called "MTT4 – High Temperature Gasification" – attached Summary Report). We have installed four identical gasifiers in the U.S. (processing dairy manure, turkey litter, egg layer pullet manure animal morality compost and wet distillers' grain), one in the Netherlands (processing hog manure solids), two in Russia (processing turkey litter and egg layer manure), and four side-by-side at Almarai Poultry in Ha'il, Saudi Arabia for processing 120,000 tons of broiler litter per year (see three attached pictures of two of these four side-by-side gasifiers). These four side-by-side gasifiers will produce 316 tons of biochar every week.

On the east coast, we have 1-ton nylon supersacks of poultry litter-derived biochar stored in Millsboro, Delaware and Kearny Point, New Jersey (see attached photo). If you are interested in purchasing tonnage-quantities of poultry-derived biochar for large field-scale studies, please let me know. The price is \$500 per ton, FOB at one of these two east coast storage facilities, or our gasification facility in south central Indiana.

Regards,

Peter Thomas Earthcare, LLC 434-989-1417 (Cell) www.earthcarelic.com